1.1 Regulatory instruments that drive trading Suggest rewording to: The Regulatory Context for Water Quality Trading: Water Quality Standards and NPDES Permits

The CWA has several different regulatory programs designed to protect water quality. Key programs which affect water quality trading are the water quality standards and the National Pollutant Discharge Elimination System (NPDES) permit programs. The establishment and attainment of water quality standards are the cornerstone of the CWA and the NPDES permit program is designed to limit pollutant discharges in order to achieve the water quality standards. Trading will most often occur via NPDES permits. If a permittee wishes to purchase Credits to meet its CWA compliance obligation, the relevant permit Effluent Limits will determine how many Credits it must buy. . Water quality standards drive the effluent limits in a permit. The permittee may seek to meet its effluent limits through purchase of credits.

Commented [KD1]: I am submitting comments to Section 1.2 only. I realize that I have missed most of the discussion and work that has happened over the past several meetings and intervening drafts. Therefore, my comments may conflict with what has already been agreed upon. I offered my comments in that context and realize they may not be all that relevant.

1.1.1 Water Quality Standards

Commented [KD2]:

For a brief summary on water quality standards I suggest you cut and paste from EPA's material rather than draft your own language. By copying EPA language you can be sure that it is accurate. See:
http://water.epa.gov/scitech/swguidance/standards/handbook/chapter01.cfm#section2

"A water quality standard defines the water quality goals for a water body, or portion thereof, by designating the use or uses to be made of the water, by setting criteria necessary to protect the uses, and by protecting water quality through antidegradation provisions. States adopt water quality standards to protect public health or welfare, enhance the quality of water, and serve the purposes of the Clean Water Act (the Act). "Serve the purposes of the Act" means that water quality standards should:

Commented [KD3]: I've copied sections you might want to consider using

- wherever attainable, achieve a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water, and take into consideration the use and value of public water supplies, and agricultural, industrial, and other purposes, including navigation (sections 101(a)(2) and 303(c) of the Act); and
- restore and maintain the chemical, physical, and biological integrity of the Nation's waters (section 101(a)).

These standards serve dual purposes: They establish the water quality goals for a specific water body, and they serve as the regulatory basis for establishing water quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act."

Each state has the responsibility under the CWA to establish numeric or narrative standards to protect its beneficial uses and submit them to EPA for approval. EPA has the authority under the CWA to review these proposed state standards and determine that the proposed standards

would protect the beneficial uses in that state. Trading is a compliance option that could assist a permittee in achieving their NPDES permit Effluent Limits which are designed to attain water quality standards established in that state.

***Draft Recommendation**: NPDES permits establish the regulatory requirements for the discharger to meet its CWA obligation for achieving water quality standards. If trading is to be used as a tool for achieving NPDES requirements, the permit should clearly describe how this will be achieved*

Commented [KD4]: I don't view this as a 'Recommendation' but rather a statement of fact. Therefore, I suggest removing it.

1.1.2 The commentary is not providing an explanation of the recommendation. I suggest you delete the commentary and if you need to provide one, focus more on why the trade needs to be included in the NPDES permit. NPDES Permits

Commented [KD5]: I removed discussion of Variances because it is out of context here. A water quality variance is a temporary change in a State/Tribe's water quality standards and its relevant criteria, usually regarding a specific pollutant. That is, the underlying standards remain in place. In granting the variance, the State/Tribe must follow its established variance policies and the variance is then subject to public and EPA review. Variances should be reviewed on a triennial basis along with the rest of the State/Tribe's water quality standards. I'm not sure about the connection to water quality trading. I suggest providing a separate sub-section to discuss Variances and the applicability to water quality trading. I suggest such a discussion come after the sections covering what is covered by an NPDES permit and what parts would need to be modified to include a water quality trade. (see my suggested location for this sub-section).

The NPDES permit (CWA section 402) is the primary regulatory tool for controlling wastewater discharges of pollutants to waters of the United States and the respective states (i.e., jurisdictional waters), and WQBELs in NPDES permits could be the incentive to seek a water quality trade.. The federal and delegated state regulations implementing CWA section 402 describe in detail what must be in a NPDES permit and both federal and state guidance exist to describe, step-by-step, what a permit writer needs to consider in developing a permit. This document does not change these regulatory requirements, but proposes what needs to be ADDED to a NPDES permit to allow a legally binding and enforceable water quality trade. add Note: Suggest that this introductory paragraph just be focused on what an NPDES permit is. I suggest you just cut and paste a summary statement from an existing EPA document, such as: http://cfpub1.epa.gov/npdes/allfaqs.cfm?program_id=0#107 "The Clean Water Act prohibits anybody from discharging "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. The permit will contain limits on what you can discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health. In essence, the permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each person discharging pollutants". "An NPDES permit will generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria). The permitee may choose which technologies to use to achieve that level. Some permits, however, do contain certain generic 'best management practices' (such as installing a screen over the pipe to keep debris out of the waterway). NPDES permits make sure that a state's mandatory standards for clean water and the federal minimums are being met."

I suggest that this paragraph cover what is included in an NPDES permit see - **http://cfpub1.epa.gov/npdes/home.cfm?program_id=45** . for specifics but it could include the following:

Commented [KD6]:

Major Components of a Permit
All NPDES permits, at a minimum, consist of five general sections:

1. ***Cover Page*** **-** Typically contains the name and location of the permittee, a statement authorizing the discharge, and the specific locations for which a discharge is authorized.

2. ***Effluent Limits*** **-** The primary mechanism for controlling discharges of pollutants to receiving waters. Permit writers spend a majority of their time deriving appropriate effluent limits based on applicable technology-based and water quality-based standards.

3. ***Monitoring and Reporting Requirements*** **-** Used to characterize waste streams and receiving waters, evaluate wastewater treatment efficiency, and determine compliance with permit conditions. The monitoring and reporting conditions section of an NPDES permit generally includes specific requirements for the following items: monitoring locations; monitoring frequencies; sample collection methods; analytical methods; and reporting and record keeping requirements.

4. ***Special Conditions*** - Conditions developed to supplement effluent limit guidelines. There are many different reasons to incorporate special conditions into a permit including: to address unique situations; to incorporate preventive requirement; to address foreseeable changes to discharges; to incorporate compliance schedules; to incorporate other NPDES programmatic requirements; to impose additional monitoring requirements; to impose requirements for special studies.

5. ***Standard Conditions*** **–** Pre-established conditions that apply to all NPDES permits and delineate the legal, administrative, and procedural requirements of the permit. The use of standard conditions helps ensure uniformity and consistency of all NPDES permits issued by authorized states or the EPA Regional Offices. See 40 CFR 122.41 for the list of standard conditions.

Every permit contains these five basic sections, but the contents of sections will vary depending on whether the permit is issued to a municipal or industrial facility and whether the permit will be issued to an individual facility or to multiple dischargers (i.e., a general permit)."

Should a point source want to pursue a water quality trade to meet its effluent limit or a portion of its effluent, the basic NPDES permit as describe above would need to be modified to include the elements of the WQ trade. A state Water Quality Trading Program would specify what is necessary to include into the NPDES permit. Below is the recommendation on what needs to be included in a NPDES permit to allow for a legally binding, enforceable trade.

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Draft Recommendations – Major Components to be added to a Permit for Water Quality Trading: Below are recommendations of what each section of a NPDES permit should include to accommodate a water quality trade:

. **Additions to the Effluent Limits Section to include water quality trade:**

1) The applicable water quality-based effluent limitations that would apply in the absence of credits. This remains the enforceable limit. Compliance with this limit remains the sole

responsibility of the permittee. Failure to meet this limit is not excused by the failure of another party to generate credit reductions. If this limit or the limit in the credit generator's permit are not massed based, the record will document the methodology (based upon appropriate flow and effluent data) to be used to ensure the credit is sufficient to meet the water quality-based effluent limitation.

2) A minimum onsite control limitation. An effluent limit to be met end-of-pipe or edge of a mixing zone is still provided. Credits may not be used to meet this limit. This limit shall be no less stringent than the technology-based effluent limit.
3) Point of compliance needs to be established for both the on-site effluent limit to be met at the facility and the portion of the effluent limit to be met by the water quality trade.

Additions to the Monitoring and Reporting Requirements Section to include water quality trade*:*

1) *A requirement for adequate monitoring and/or inspections (verification of Practices), sufficient to quantify and verify the generation of pollutant reductions to be used as credits.*
2) *Monitoring locations need to be specified*
3) *A requirement that the discharge monitoring report (DMR) include: (1) the actual loadings from the effluent of the permittee; (2) total verified credits; and (3) the net loading, accounting for the use of credits, as verified and documented*
    a. *A requirement that the permittee submit an annual report documenting that sufficient credits were generated to meet the permittee's water quality-based effluent limitation.*

Additions to the Special Conditions Section to include water quality trade:

Note: This is the Section where the elements of the trade should be listed in this section. Suggested elements to include are:

1) Source(s) providing the credit to be applied to the permittee's water quality–based effluent limit shall be identified by both name and location (including lat/long). If represented by a third party aggregator/bank, both the source and the bank must be identified in the permit. If the credit generating source is a point source, then the current NPDES permit needs to be identified.
2) Credit ratios applicable for each generator shall be stated here. The record shall include the calculations for these ratios, and what they accounted for ie. difference in location; type of pollutants; and any uncertainty regarding the likelihood that sufficient reductions will occur due to factors such as variability in the construction, design, operations, and maintence of a practice, and meteorological variability.
3) Demonstration that the credits used to meet the permittee's water quality-based effluent limitation reflect pollutant reductions beyond the baseline already required by the CWA or applicable state requirements, or identified in the applicable TMDL. The record must show the applicable baseline for any generator identified above.
4) Identification of the type(s) of verification practices, including identification of the independent third party responsible for conducting monitoring and/or inspections and their qualifications, the location of such practices, and the frequency required to sufficiently quantify the credit in order to ensure adequate reductions are made to protect water quality

Commented [KD7]: Again, I realize I missed much of the discussion so these recommendations may be misplaced. Offered here for consideration.

standards as required in the monitoring requirements (see Monitoring Section above). Verification practices should one verification practice conducted by the credit generator in each reporting period as defined by the DMR conditions in the permit, and one verification practice conducted by an independent third party annually. **5)** Documentation demonstrating the credit generating source's consent to allow the permittee, the Director and/or the Administrator and their representatives to verify the offset credit generation through onsite inspection, Monitoring, requests for document production, or any other reasonable means for the duration of the permit term.

Commentary: The discussion here could possibly elaborate on the above recommendations and why they are important to include in the permit.

Additional NPDES Permit Related Aspects and Recommended Additions to Accommodate Water Quality Trading

Commented [KD8]: Since I only reviewed this one section of the document, these topics may have been addressed elsewhere in the document. If they are, I suggest moving them here since they are topics connected to the NPDES PERMIT.

Fact Sheet:

In addition to the specific items to include in the NPDES permit itself, the Fact Sheet or Statement of Basis must include the rationale and details for water quality trade. The Fact Sheet and supporting documentation are the primary support for defending the permit in an appeal process. It briefly sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. When the permit is in the draft stage, the fact sheet and supporting documentation serve to explain the rationale and assumptions used in deriving the limitations to the discharger, the public, and other interested parties. 40 CFR 124.8, and 124.5 provide what is necessary to include in the Fact Sheet. This is where the water quality trade should laid out in detail so that it is transparent to all.

Use of Compliance Schedules to allow time to achieve come into compliance with the CWA and applicable regulations.

The NPDES regulations at section 40 CFR 122.47 allow permit writers to establish schedule of compliance to give permittees additional time to achieve compliance with the CWA and applicable regulations. Schedules developed under this provision must require compliance by the permittee as soon as possible. There are restrictions on the use of compliance schedule. To review the restrictions see 40 CFR 122.47.

Include here a discussion of how compliance schedules might be used to accommodate a water quality trade for a permittee.

Application of Anti-backsliding and Anti-degradation provisions

This is where a discussion of how anti-backsliding would be addressed and anti-degradation provisions would be addressed.

Variances and their applicability to Water Quality Trading:

Note: I'm am not sure what the discussions/recommendations on the use of variances in the context of trading, nor do I understand the connection of variances to trading and therefore have no suggestions to add. Please contact Susan Poulsom if you would like information.

NPDES PERMIT APPLICATION

When A facility needs an individual NPDES permit, it mus submit a permit application. Application forms and requirements are specific to the type of facility and discharge. NPDES permit application requirements are in 40 CFR part 122, Subpart B. In addition to all of the established required information, information on a water quality trade should also be included in the application. Suggested information includes:

1) The estimated, or actual where available, quanity of loadings of the pollutant of concern to be discharged by the facility after implementation of onsite pollutant removal practices, before any credits from a trade are applied.
2) For each source expected to generate credits the following information is recommented to be provided in the Permit Application:
    a. The name, location (including lat/long), and NPDES permit number, if applicable, of the credit generating source;
    b. For point sources, the most recent valid and representative data sufficient to determine pollutant variability
    c. An identification of the pollutant type;
    d. The estimated quantity of loadings to be reduced, accounting for the applicable baseline, and the proposed methods to make such reductions;
    e. Any supplemental information necessary to calculate appropriate ratios
    f. An estimated timeframe of when the credit will be generated, and if there is any expected variation in credit generation, the timing of such variation.
    g. Documentation (i.e., contract, MOA) indicating an agreement for the source expected to generate the credits to actually provide those credits.
    h. A proposed monitoring plan or other description of how the applicable baseline and credits that are generated will be verified and confirmed.
    i. Documentation demonstrating the source's consent to allow the permittee, the Director and/or the Administrator and their representatives to verify the offset generation through onsite inspection, monitoring, requests for document production, or any other reasonable means for the duration of the permit term.

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